# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY BEFORE THE ADMINISTRATOR

In the Matter of:	_)	
Dragon Products Company, LLC	)	
Respondent	)	Docket No. CAA 01-2013-0053
	)	

# CONSENT AGREEMENT AND FINAL ORDER

The Complainant, United States Environmental Protection Agency, Region I

("EPA"), has alleged that Dragon Products Company, LLC ("Respondent" or "Dragon")

violated certain provisions of the Maine state implementation plan ("SIP") and of the

Clean Air Act ("CAA") that prohibit the construction or modification of a major

stationary source without obtaining and operating in compliance with new source review

("NSR") requirements. EPA may enforce such NSR requirements under Section 113 of
the Clean Air Act, 42 U.S.C. § 7413.

Respondent denies that it violated the SIP and CAA as alleged. However, EPA and Respondent agree that settlement without litigation, and through a Consent Agreement ("Consent Agreement" or "Agreement") and a Final Order ("Final Order" or "Order") (collectively, "CAFO"), is an appropriate means of resolving this matter.

#### I. CONSENT AGREEMENT

#### A. AUTHORITY AND PARTIES

Complainant is the Director of the Office of Environmental Stewardship of EPA
 Region I. The Administrator of EPA has delegated to the Regional Administrator of EPA

Region I the authority to issue complaints, and the Regional Administrator, in turn, has re-delegated that authority to the Complainant.

2. Respondent is a "person" as defined in section 302(e) of the Act, 42 U.S.C. § 7602(e). Respondent operates a cement production facility in Thomaston, Maine (the "Thomaston facility"). Equipment operated by Respondent at the Facility emits air pollutants regulated under the Clean Air Act and its implementing regulations.

## B. STATUTORY AND REGULATORY AUTHORITY

#### Nonattainment New Source Review

- 3. Part D of Title I of the Act, 42 U.S.C. §§ 7501-7515, sets forth provisions for New Source Review ("NSR") requirements for areas designated as nonattainment for purposes of meeting the National Ambient Air Quality Standards ("NAAQS"). These provisions are referred to herein as "Nonattainment NSR." The Nonattainment NSR program is intended to reduce emissions of air pollutants in areas that have not attained NAAQS so that the areas make progress towards meeting the NAAQS.
- 4. Under Section 172(c)(5) of the Act, 42 U.S.C. § 7502(c)(5), a state is required to adopt Nonattainment NSR SIP rules that include provisions that require permits for the installation and operation of new or modified "major stationary sources" within nonattainment areas. Such permits are to conform to the requirements of Section 173 of the Act, 42 U.S.C. § 7503.
- 5. Section 182(c) of the Act, 42 U.S.C. § 7511(c), requires a state's Nonattainment NSR SIP rules to define a "major stationary source" located in a serious nonattainment area to include any stationary source or group of sources located within a contiguous area

and under common control that emits, or has the potential to emit, at least 50 tons per year of volatile organic compounds.

- 6. Section 173(a) of the Act, 42 U.S.C. § 7503(a), requires that a SIP's permit program provide that permits to construct and operate for new or modified major stationary sources may only be issued if, among other things, sufficient offsetting emission reductions have been obtained to reduce existing emissions to the point where reasonable further progress towards meeting the ambient air quality standards is maintained; and, if the proposed source is required to comply with the lowest achievable emission rate ("LAER").
- 7. The State of Maine has adopted Nonattainment NSR SIP rules in accordance with Part D of Title I of the Act, 42 U.S.C. §§ 7501-7515. At all times relevant to this action, Maine's Nonattainment NSR SIP rules in Chapters 100 and 115 have been approved by EPA as part of the Maine SIP.
- 8. Maine's Emission License Regulations, found at Chapter 115 of Maine's Air Pollution Control Regulations ("APC Regulations"), requires all new and modified sources to apply for and receive a license from the Maine Department of Environmental Protection ("Maine DEP").
- 9. Maine's Definitions Regulation, found at Chapter 100 of Maine's APC Regulations, defines a "major source" to include any source which emits or has the potential to emit 100 tons per year ("TPY") of nitrogen oxides ("NOx").
- 10. Chapter 100 of Maine's APC Regulations defines "major modification" to include a physical or operational change to a major source resulting in a net emissions increase equal to or greater than 40 TPY of NOx.

11. Chapter 115, Section II.B of Maine's APC Regulations states that a modification that results in a significant net emissions increase solely by virtue of a relaxation in any enforceable limitation on the capacity of a modification to emit a pollutant shall be considered a modified source.

### Enforcement Authority

- 12. EPA and the Department of Justice have jointly determined, in accordance with Section 113(d)(1) of the Act, that the resolution of this matter is appropriate through an administrative action.
- 13. This is a civil administrative action brought under section 113(d)(1)(A) of the Clean Air Act (the "Act"), as amended, 42 U.S.C. § 7413(d), and the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties, 40 C.F.R. Part
- 14. Clean Air Act sections 113(d)(1)(A) provides that EPA may issue civil administrative penalty orders for SIP violations, including violations of any requirement or prohibition of a SIP. 40 U.S.C. §§7413 (d)(1)(A).
- 15. A person who violates the Act is liable for a civil penalty of up to \$37,500 per day for violations occurring after January 12, 2009, as provided for in the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461, as amended by 31 U.S.C. § 3701. See, 40 C.F.R. Part 19; 69 Fed. Reg. 7126 (Feb. 13, 2004); 73 Fed. Reg. 239 (Dec. 11, 2008).

#### C. ALLEGED FACTS AND VIOLATIONS

16. Dragon owns and operates a cement production facility in Thomaston, Maine (the "Thomaston facility"). The cement kiln system operated at the Thomaston facility was initially constructed over 35 years ago. At all times relevant to this action, the

Thomaston facility has been a major source of NOx as a result of emissions from the cement kiln system.

- 17. In or about the Spring of 1995, Dragon undertook a number of projects at its cement kiln system, including, but not limited to, changes to the chain hanging pattern, the fuel injection method, and the clinker cooler. Dragon maintains that these projects were part of a NOx reduction plan approved by the Maine DEP. At the time of these changes, the Thomaston facility was located in a moderate nonattainment area for the pollutant ozone and was also located in the ozone transport region ("OTR") established by Section 184 of the CAA, 42 U.S.C. § 7484.
- 18. In October 1995, Dragon obtained an air license amendment from Maine DEP increasing the Thomaston facility's licensed production limit from 1464 tons of clinker per day to 1850 tons of clinker per day. At the time of this license amendment, the Thomaston facility was located in the OTR.
- 19. In or about 1997, Dragon replaced a draft induction fan in the cement kiln system.
  At the time of the fan installation, the Thomaston facility was located in the OTR.
- 20. In or about 2004, Dragon converted the cement kiln system from a wet process to a dry process. At the time of that change, the Thomaston facility was located in the OTR.
- 21. EPA alleges that the projects referenced in paragraph 17 above, which include changes to the chain hanging pattern, the fuel injection method, and the clinker cooler, constitute a modification that resulted in a net increase in emissions of NOx equal to or greater than 40 TPY, triggering the requirements of Chapter 115 of Maine's APC Regulations applicable to major modifications at major sources.

- 22. EPA alleges that the air license amendment provisions referenced in paragraph 18 above, which increased the Thomaston facility's licensed production limit, constitutes a modification that resulted in a net increase in emissions of NOx equal to or greater than 40 TPY, triggering the requirements of Chapter 115 of Maine's APC Regulations applicable to major modifications at major sources.
- 23. EPA alleges that the project referenced in paragraph 19 above, involving the installation of a draft induction fan, constitutes a modification that resulted in a net increase in emissions of NOx equal to or greater than 40 TPY, triggering the requirements of Chapter 115 of Maine's APC Regulations applicable to major modifications at major sources.
- 24. EPA alleges that the conversion referenced in paragraph 20 above constitutes a modification that resulted in a net increase of emissions of NOx equal to or greater than 40 TPY, triggering the requirements of Chapter 115 of Maine's APC Regulations applicable to major modifications at major sources.
- 25. EPA alleges that Respondent violated the Maine SIP as described above and is liable for penalties for those violations under Section 113(d) of the Act.
- 26. EPA provided notice of the alleged violations described above to Respondent and to the Maine DEP in the form of a Notice of Violation dated June 30, 2009 at least 30 days prior to the issuance of this CAFO, as required under Section 113(d) of the Act.

#### D. TERMS OF SETTLEMENT

The EPA and Respondent, by their undersigned representatives, hereby consent and agree as follows:

- Respondent will pay to the United States a civil penalty, pursuant to the terms of
   Section E of this Consent Agreement.
- Agreement, Respondent shall apply for and obtain air emissions license amendments from the Maine DEP, pursuant to the terms and conditions of Attachment 1 of this Consent Agreement. Dragon shall apply to the Maine DEP under Chapter 115 for license amendments requiring measures to establish and formalize a 30-Day Rolling Average Emission Limit (as defined in Attachment 1) for NOx for all periods of kiln operation.

  Dragon shall seek amendments including the following measures:
  - a. Install and Operate Baseline NOx Monitor: Dragon shall install a NOx monitor to continuously measure baseline, uncontrolled NOx emissions from the kiln ("inlet NOx monitor"). Following installation of the inlet NOx monitor,

    Dragon shall collect baseline uncontrolled NOx emissions data, in addition to the NOx emission data currently collected by the existing NOx CEM ("outlet NOx monitor"), for a period of up to one calendar year.
  - b. <u>Conduct Demonstration Period</u>: Following baseline data collection,
    Dragon shall operate the SNCR during all periods of kiln operation at a molar ratio of 1.0, for a period of no less than 90 Operating Days and up to one calendar year, while continuing to monitor NOx using the inlet NOx monitor and the outlet NOx monitor.
  - Establish 30-day Rolling Average Emission Limit: Based on data from the demonstration period, Dragon shall seek approval of and operate in accordance

- with a 30-Day Rolling Average Emission Limit (as defined in Attachment 1) expressed in terms of pounds of NOx per ton of clinker.
- d. <u>Amend License to Incorporate New Limit</u>: Dragon shall apply to the Maine DEP for amendment of Dragon's air emissions license to include an emission limit no less stringent than the approved 30-Day Rolling Average Emission Limit.
- 29. In accordance with 40 C.F.R. §22.18(b)(2) and for the purpose of this proceeding, Respondent (i) admits that EPA has jurisdiction over the subject matter of this Consent Agreement and its incorporation into a Final Order and over Respondent; (ii) neither admits nor denies the specific factual allegations and the other allegations contained in Section I.C of this Consent Agreement; (iii) consents to any and all conditions specified in this Consent Agreement, including the assessment of the civil administrative penalty under Section I.E of this Consent Agreement; (iv) waives any right to request a judicial or administrative hearing or otherwise to contest any issue of law or fact set forth in this Consent Agreement; and (v) waives the right to appeal the Final Order incorporating this Consent Agreement in any administrative or judicial forum.
- 30. Respondent and Complainant agree to simultaneously commence and conclude this proceeding through the issuance of a CAFO under 40 CFR § 22.18(b)(2) and (3).
- 31. Respondent and Complainant agree to submit this Consent Agreement to the Regional Judicial Officer, with a request that it be incorporated into a Final Order. Upon filing, the EPA will transmit a copy of the filed Consent Agreement to the Respondent. This Consent Agreement and the accompanying Final Order shall become effective pursuant to Section I.I of this Consent Agreement.

- 32. Failure by Respondent to timely apply for and diligently pursue the air emission license, referenced in Paragraph 28 of this Consent Agreement, according to the terms and conditions of Attachment 1 of this Consent Agreement, shall render any release or satisfaction of liability afforded under this Agreement null and void.
- 33. Respondent realizes that there are significant penalties for submitting false or misleading information, including the possibility of fines and imprisonment for knowing submission of such information, under 18 U.S.C. § 1001. Complainant reserves the right to seek and obtain appropriate relief if Complainant finds that the information supplied by the Respondent to Complainant concerning this matter was materially false, inaccurate, or incomplete at the time such information was provided to the EPA.

#### E. CIVIL ADMINISTRATIVE PENALTY

- 34. In light of the statutory factors of Section 113(e) of the Act, EPA has determined that it is fair and proper to assess a civil penalty for the violations alleged in this CAFO in the amount of \$50,000.
- 35. Respondent hereby consents to pay a civil penalty of \$50,000 within thirty (30) days of the effective date of this Consent Agreement and Final Order for the purposes of settlement of federal civil penalties for the violations alleged in Section I.C of this Consent Agreement.
- 36. Respondent shall make payment by submitting a bank, cashier's or certified check, to the order of the "Treasurer, United States of America," in the amount of \$50,000 to:

U.S. Environmental Protection Agency Fines and Penalties Cincinnati Finance Center P.O. Box 979077 St. Louis, MO 63197-9000

Respondent shall note the case name and docket number of this action on the check and in an accompanying cover letter, and shall simultaneously provide copies of the check and cover letter to:

Regional Hearing Clerk
U.S. Environmental Protection Agency, Region I
5 Post Office Square, Suite 100 (Mail Code ORA18-1)
Boston, MA 02109-3912

and

Thomas T. Olivier
Senior Enforcement Counsel
U.S. Environmental Protection Agency, Region I
5 Post Office Square, Suite 100 (Mail Code OES04-3)
Boston, MA 02109-3912

- 37. Payment of the above civil administrative penalty shall not be used by Respondent or any other person as a tax deduction from Respondent's federal, state, or local taxes.
- 38. Failure to pay the civil administrative penalty within 30 days of the effective date of this Consent Agreement, may lead to any or all of the following actions:
  - a. The debt being referred to a credit reporting agency, a collection agency, or to the Department of Justice for filing of a collection action in the appropriate United States District Court. 40 C.F.R. §§13.13, 13.14, and 13.33. In any such collection action, the validity, amount, and appropriateness of the assessed penalty and of this Consent Agreement shall not be subject to review.
  - b. The debt being collected by administrative offset (i.e., the withholding of money payable by the United States to, or held by the United States for, a person to satisfy the debt the person owes the Government), which includes, but is not

limited to, referral to the Internal Revenue Service for offset against income tax refunds. 40 C.F.R. Part 13, Subparts C and H.

- d. EPA may (i) suspend or revoke Respondent's licenses or other privileges; or (ii) suspend or disqualify Respondent from doing business with EPA or engaging in programs EPA sponsors or funds. 40 C.F.R. § 13.17.
- e. Pursuant to Section 113(d)(5) of the Act, if Respondent fails to pay any penalty amount it will be subject to an action to compel payment, plus interest, enforcement expenses, and a nonpayment penalty. Interest will be assessed on the penalty if it is not paid by the due date established herein. In that event, interest will accrue from the date the Consent Agreement and Final Order was signed by the EPA Regional Judicial Officer, at the "underpayment rate" established pursuant to 26 U.S.C § 6621(a)(2). In the event that penalty is not paid when due, an additional charge will be assessed to cover the United States' enforcement expenses, including attorneys fees and collection costs. A quarterly nonpayment penalty will be assessed for each quarter during which the failure to pay the penalty persists. Such nonpayment penalty shall be 10 percent of the aggregate amount of Respondent's outstanding penalties and nonpayment penalties hereunder accrued as of the beginning of such quarter.

#### F. GENERAL PROVISIONS

39. Other than as provided in Paragraph 36 with respect to payment of the penalty, all submissions required by this Consent Agreement shall be sent to:

If by Respondent:

Susan Studlien, Director
Office of Environmental Stewardship
U.S. Environmental Protection Agency
Five Post Office Square Suite 500
Boston, Massachusetts 02109-3912
Attention: Steve Rapp, Chief, Air Technical Unit

If by EPA:

Dragon Products Company, LLC P.O. Box 191 Thomaston, Maine 048691 Attn: Manager, Environmental Compliance

with a copy to:

Dragon Products Company, LLC P.O. Box 218 Harleyville, SC 29448 Attn: Director, Environmental Affairs

40. In all documents or reports submitted to EPA pursuant to this Consent

Agreement, Respondent shall, by one of its managers authorized to bind the company,

sign and certify under penalty of law that the information contained in such document or

report is true, accurate, and not misleading by signing the following statement:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

- 41. For each requirement of Attachment 1 to this CAFO, Respondent shall maintain legible copies of the documentation and data used for any and all documents or reports submitted to EPA pursuant to this CAFO for a period of three years following completion of all requirements under Attachment 1. Respondent shall provide the documentation and data to EPA within 14 days of a request for such information.
- 42. Emission reductions resulting from compliance with the requirements of this CAFO shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining netting credit or offset under the CAA's Nonattainment New Source Review or PSD programs.

#### G. EFFECT OF SETTLEMENT

- 43. In accordance with 40 C.F.R. § 22.18(c), completion of the terms of Section I.E of this Consent Agreement and accompanying Final Order, concerning the payment of the stated civil penalty, resolves Respondent's liability for federal civil penalties for the violations and facts specifically alleged in Section I.C of this Consent Agreement and any other alleged violations of the NSR provisions of the SIP and CAA, relating to emissions of NOx from the cement kiln system, that occurred prior to the effective date of this Consent Agreement and Final Order.
- 44. Completion of the terms of Section I.D, Paragraph 28, and of Attachment 1 of this Consent Agreement, resolves Respondent's liability for federal injunctive relief for the violations and facts specifically alleged in Section I.C of this Consent Agreement.
- 45. This Consent Agreement and accompanying Final Order does not exempt, relieve, modify, or affect in any way Respondent's duty to comply with all applicable federal, state, and local laws, regulations, rules, ordinances, and permits, nor shall it restrict the

EPA's authority to seek compliance with any applicable laws or regulations, nor shall it be construed to be a ruling on, or determination of, any issue related to any federal, state or local permit.

- 46. This Consent Agreement constitutes the entire agreement and understanding of the parties and supersedes any prior agreements or understandings, whether written or oral, with respect to the subject matter hereof.
- 47. The terms, conditions, and compliance requirements of this Agreement may not be modified or amended except upon the written agreement of both parties, and approval of a Regional Judicial Officer.
- 48. If Complainant alleges that Respondent has failed to comply with any provision contained in this Consent Agreement, the EPA may take, and Respondent waives any rights it may possess to challenge the authority of the EPA to take, any civil action available in law or in equity to enforce the requirements of the Clean Air Act, including to compel compliance with this Consent Agreement and attached Final Order or to seek an additional penalty for such noncompliance. Respondent does not waive its right to contest any allegations that it failed to comply with the Consent Agreement or that it should be held liable for such alleged non-compliance.
- 49. The EPA reserves the right to revoke this Consent Agreement if and to the extent that the EPA finds, after signing this Consent Agreement, that any information provided by Respondent was materially false or inaccurate at the time such information was provided to the EPA, and the EPA reserves the right to assess and collect any and all civil penalties for any alleged violation described herein. The EPA shall give Respondent oral

notice of its intent to revoke, which shall not be effective until received by Respondent in writing.

50. Respondent and Complainant agree to submit this Consent Agreement to the Regional Judicial Officer, with a request that it be incorporated into a Final Order. Upon filing, the EPA will transmit a copy of the filed Consent Agreement to the Respondent.

This Consent Agreement and the accompanying Final Order shall become effective pursuant to Section I.I of this Consent Agreement.

#### H. ATTORNEYS' FEES AND COSTS

51. Each party shall bear its own costs and fees in this proceeding, including attorneys fees, and specifically waives any right to recover such costs from the other party pursuant to the Equal Access to Justice Act, 5 U.S.C. § 504, or other applicable law.

#### I. EFFECTIVE DATE

52. In accordance with 40 C.F.R. §§22.18(b)(3) and 22.31(b), this Consent

Agreement shall be effective on the date that the accompanying Final Order, having been approved and issued by either the Regional Judicial Officer or Regional Administrator, is filed with the Regional Hearing Clerk.

#### J. BINDING EFFECT

- 53. Respondent certifies that its undersigned representative is fully authorized to enter into the terms and conditions of this CAFO and to execute and legally bind Respondent to this document.
- 54. The provisions of this Consent Agreement shall apply to and be binding upon Respondent and its officers, directors, employees, agents, trustees, servants, authorized representatives, successors, and assigns.

In the Matter of Dragon Products Company, LLC Docket No. CAA-01-2013-0053 Consent Agreement and Final Order

FOR DRAGON PRODUCTS COMPANY, LLC

Date 08/26/2013

Stephen P. Holt

Director, Environmental Affairs

16

In the Matter of Dragon Products Company, LLC Docket No. CAA-01-2013-0053 Consent Agreement and Final Order

# FOR UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Susan Studlien, Director

Office of Environmental Stewardship

U.S. Environmental Protection Agency, Region I

Thomas T. Olivier

Senior Enforcement Counsel

U.S. Environmental Protection Agency, Region I

In the Matter of Dragon Products Company, LLC Docket No. CAA-01-2013-0053
Consent Agreement and Final Order

# II. FINAL ORDER

The foregoing Consent Agreement is hereby approved and incorporated by reference into this Final Order. The Respondent is ordered to comply with the terms of the above Consent Agreement, effective on the date it is filed with the Regional Hearing Clerk.

U.S. ENVIRONMENTAL PROTECTION AGENCY

LeAnn Jensen

Acting Regional Judicial Officer

U.S. Environmental Protection Agency, Region 1

Date.

In the Matter of Dragon Products Company, LLC Docket No. CAA-01-2013-0053 Consent Agreement and Final Order

#### ATTACHMENT 1

- In accordance with Paragraph 28 of the Consent Agreement and Final Order ("CAFO"), Dragon shall apply for and obtain air emissions license amendments to establish a revised emission limitation for nitrogen oxides (NOx) at its Thomaston, Maine facility.
- 2. Within 90 days of the effective date of this CAFO, Dragon shall apply to the Maine DEP under Chapter 115 for license amendments including the following measures, as more fully described in Sections 4-8 of this Attachment 1:

#### 3. Definitions

The following definitions apply to terms in this Attachment 1 to the CAFO:

"30-Day Rolling Average Emission Limit" shall mean the maximum allowable rate of emission of NOx from the kiln, expressed as pounds of NOx emitted per ton of clinker produced, as calculated under Section 7.b of this Attachment 1.

"Inlet NOx monitor" shall mean a NOx monitor to continuously measure baseline, uncontrolled NOx emissions from the kiln.

"Operating Day" shall mean any day which includes an Operating Hour.

"Operating Hour" shall mean any hour of a day when raw material is being fed into the kiln and fuel is being fired in the kiln.

"SNCR" shall mean the existing pollution control system that injects an ammonia-based reagent into the gas stream before it has exited the kiln stack for the purpose of reducing NOx emissions.

 NOx Monitor Installation and Data Collection Plan. Within 90 days after filing of this CAFO, Dragon shall install the inlet NOx monitor and commence operation of the inlet NOx monitor in accordance with 40 C.F.R. 60.13 and Part 60 Appendix B.

#### 5. Baseline Data Collection

a. Dragon shall commence the baseline data collection period as soon as normal operation of the NOx monitor begins, after any necessary testing, calibration and

shakedown period (as provided by the manufacturer's specifications and recommendations) is complete. Data collection shall begin no later than 120 days from the effective date of the CAFO. The baseline data collection period shall include all hours of kiln operation. Dragon shall conduct the baseline collection period for 9 months from the date of commencement.

- b. During the baseline data collection period, Dragon shall operate the kiln in accordance with existing air emission license requirements, and as necessary to produce a quality cement clinker product. Dragon shall not adjust operating parameters to increase the rate of emission (expressed as lbs/ ton of clinker produced) for uncontrolled NOx during the baseline data collection period. Dragon shall operate the kiln in a manner consistent with good air pollution control practice for achieving applicable emission limitations for pollutants other than NOx.
- c. Within 60 days of completion of the baseline data collection period, Dragon shall submit to EPA and Maine DEP a "Baseline Data Report" including the baseline data collected during the baseline data collection period. The baseline data will include the following information either derived from available direct monitoring or as estimated from available monitored or measured data:
  - i. Kiln production rate in tons of clinker (daily total);
  - ii. Raw material feed rate in tons (daily total);
  - iii. The operating status of the raw mill, i.e., whether the raw mill is on or off;
  - iv. Type and percentage of each raw material used and the total feed rate (daily);
  - v. NOx concentrations (dry basis) and mass rates for the Kiln (daily average for concentrations and daily totals for mass rates) as measured at the inlet NOx monitor; NOx shall be reported in lb/hr, and lb/ton of clinker produced;
  - vi. ammonia concentrations (dry basis) as measured at the stack;
  - vii. available temperature data indicative of the burning zone (daily average);
  - viii. feed shelf temperature (daily average);
  - ix. kiln fuel feed rate and type of fuel by weight or heat input rate (calculated to a daily average);

- x. kiln oxygen, kiln back-end oxygen or feed shelf oxygen (daily average %);
- xi. documentation of any start-up, shut-down, or malfunction ("SSM") events; and
- xii. an explanation of any gaps in the data or missing data.
- d. Dragon shall submit the Baseline Data Report to EPA and Maine DEP in an electronic format and shall explain the reasons for any data not collected for each of the parameters listed above in Section 4.c. Dragon shall report all data in a format consistent with and able to be manipulated by Microsoft Excel.

#### 6. Demonstration Period

- a. Immediately following completion of the baseline data collection period, Dragon shall commence a demonstration period. During the demonstration period Dragon shall operate the SNCR during all periods of kiln operation at a molar ratio of 1.0, i.e., injecting one mole of ammonia (NH3) to every one mole of nitrogen oxide (NOx) indicated by the NOx concentrations measured by the inlet NOx monitor, and continuously monitor NOx concentrations at the inlet NOx monitor and at the outlet NOx monitor.
- b. Dragon may adjust the molar ratio of the SNCR during the demonstration period if necessary to meet applicable ammonia slip limits under Dragon's air emissions license.
- c. Dragon shall conduct the demonstration period for a minimum of 90 Operating Days, and for no longer than one calendar year from the date of commencement of the demonstration period.

#### 7. Demonstration Report

- a. Within 30 days of the end of the demonstration period, Dragon shall submit a "Demonstration Report" to EPA and Maine DEP including the data collected during the demonstration period. The demonstration period data will include the following information either derived from available direct monitoring or as estimated from monitored or measured data:
  - i. Kiln production rate in tons of clinker (daily total);
  - ii. Raw material feed rate in tons (daily total);
  - iii. The operating status of the raw mill, i.e., whether the raw mill is on or off;

iv. Type and percentage of each raw material used and the total feed rate (daily);

v. NOx concentrations (dry basis) and mass emission rates for the kiln (daily average for concentrations and daily totals for mass emission rates) as measured at the inlet NOx monitor; NOx shall be reported in lb/hr, and lb/ton of clinker produced;

vi. ammonia concentrations (dry basis) as measured at the stack;

vii. available temperature data indicative of the burning zone (daily average);

viii. feed shelf temperature (daily average);

ix. kiln fuel feed rate and type of fuel by weight or heat input rate (calculated to a daily average);

x. kiln oxygen, kiln back-end oxygen or feed shelf oxygen (daily average %);

xi. documentation of any SSM events; and

xii. an explanation of any gaps in the data or missing data.

b. The Demonstration Report shall propose a 30-Day Rolling Average Emission Limit based on the demonstration period data in accordance with the following formula:

 $X = \bar{u} + 1.645\sigma$  where:

X=30-Day Rolling Average Emission Limit (lbs NOx/ton clinker)  $\bar{u}=$  mean of all of the 30-day controlled NOx emission rate averages collected during the demonstration period  $\sigma=$  standard deviation of all of the 30-day NOx emission rate averages collected during the demonstration period

- c. Dragon shall submit the Demonstration Report to EPA and Maine DEP in an electronic format and shall explain the reasons for any data not collected for each of the parameters listed in Section 7.a of this Attachment 1. Dragon shall report all data in a format consistent with and able to be manipulated by Microsoft Excel.
- d. EPA and Maine DEP shall review and comment on the Demonstration Report. Dragon shall respond to any comments received within 45 days of their receipt of

both EPA's and Maine DEP's comments. EPA will subsequently approve or disapprove the Demonstration Report in writing.

e. If EPA disapproves the Demonstration Report's proposed 30-Day Rolling Average Emission Limit, EPA will designate an approved 30-Day Rolling Average Emission Limit. In the event Dragon invokes Dispute Resolution with respect to EPA's disapproval of the proposed 30-Day Rolling Average Emission Limit, or EPA's designation of an approved 30-Day Rolling Average Emission Limit, it shall follow the procedures set forth in Attachment 2 of the CAFO (Dispute Resolution for Emission Limit). During the period of Dispute Resolution, the EPA-designated 30-Day Rolling Average Emission Limit shall not apply, and Dragon shall demonstrate compliance and maintain compliance with the Demonstration Report's proposed 30-Day Rolling Average Emission Limit.

# 8. Application for License Amendments; Operation pending License Amendment

- a. Within 60 days of approval of the Demonstration Report by EPA, Dragon shall apply to the Maine DEP for amendment of Dragon's air emissions license to include an emission limit no less stringent than the approved 30-Day Rolling Average Emission Limit. Dragon may also apply for modification or elimination of the existing 90-day rolling average for NOx and other existing NOx limits.
- b. From the date of approval of the 30-Day Rolling Average Emission Limit, and until issuance of an amended air emissions license incorporating a NOx emission limit no less stringent than the approved 30-Day Rolling Average Emission Limit, Dragon shall operate so as to comply with the approved 30-Day Rolling Average Emission Limit. Each Operating Day, compliance with the approved 30-Day Rolling Average Emission Limit shall be determined by dividing the total number of pounds of NOx emitted by the Kiln during the Operating Day and the previous 29 Operating Days by the total tons of clinker produced by the Kiln during the same 30 Operating Days.

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# ATTACHMENT 2: Dispute Resolution for Emission Limit

- A. <u>Informal Dispute Resolution</u>: A dispute concerning Respondent's compliance with the requirements of Paragraph 28 of the CAFO or of Attachment 1 of the CAFO shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when Respondent provides written notice to EPA describing the nature of the dispute and requesting informal negotiations to resolve it. The period of informal negotiations shall not exceed twenty (20) days beyond the date that EPA receives Respondent's written notice unless EPA and Respondent agree in writing to a longer period. If the parties cannot resolve a dispute by informal negotiations, then the position advanced by EPA shall be considered binding unless, within fifteen (15) days after the conclusion of the informal negotiation period, Respondent invokes formal dispute resolution procedures as set forth below.
- B. Formal Dispute Resolution: Respondent shall invoke formal dispute resolution procedures, within the time period provided in the preceding Section A, by providing written notice to EPA containing a statement of position regarding the matter in dispute. The statement of position shall include, but may not be limited to, any factual data, analysis, or opinion supporting Respondent's position and any supporting documentation relied upon by Respondent. Following receipt of Respondent's statement of position submitted pursuant to this Section B, EPA will serve on Respondent its statement of position. EPA's statement of position shall include, but may not be limited to, any factual data, analysis, or opinion supporting EPA's

position and any supporting documentation relied upon by EPA.

- C. Following receipt of the statements of position submitted by Respondent and EPA pursuant to Section B, the Director of the Office of Environmental Stewardship ("OES Director"), EPA Region 1, will issue a determination resolving the dispute. The determination of the OES Director shall be final and definitive. The parties to this CAFO each reserve any rights they may have under applicable law with respect to any appeal from the determination of the OES Director.
- D. The invocation of dispute resolution procedures shall not extend, postpone, or affect any obligation of Respondent under this CAFO not directly in dispute, unless the final resolution of the dispute so dictates.

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